

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Gary F. Holland Paul H. Wierenga	Docket:	103003-200
Serial No.:	10/825,076	Art Unit:	3752
Filed:	April 15, 2004	Examiner:	NGUYEN, Dinh Q.
Assignee:	Aerojet-General Corporation	Conf. No.	7149
Title:	VEHICLE FIRE EXTINGUISHER		

INTERVIEW SUMMARY UNDER 37 CFR 1.133

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants thank Examiner Nguyen for the courtesy of a telephonic interview granted to Applicants' attorney on November 23, 2010. A complete recordation of that interview follows.

1. No exhibits were shown nor were any demonstrations conducted.
2. Independent claims 55, 56 and 71 were discussed. Claims 55 and 56 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicants' attorney identified sections of the Specification as filed that are believed to fully support the claims and establish that, at the time the application for a patent was filed, the inventors had possession of the subject matter claimed therein. This analysis was presented in the "Remarks" Section of an amendment filed by the Applicants on November 23, 2010, subsequent to the telephone interview, but before receipt of the Examiner's Interview Summary. That "Remarks" Section is reprinted in this interview summary.
Applicants presented new claim 71 that is drawn to the same or substantially the same subject matter as claim 56, closely tracking the words from Applicants' Specification.

3. No prior art was discussed.
4. Applicants proposed no amendment to either claim 55 or claim 56. Applicants added new claim 71. Support for claim 71 is shown in the "Remarks" Section that follows.
5. The general thrust of the argument presented to the Examiner was that claims 55 and 56 are supported by Applicants' Specification as filed and that the Specification establishes that the inventors had possession of the subject matter claimed therein at the time that the application was filed.
6. No other pertinent matters were discussed.
7. While agreement was not reached, the Examiner agreed to review the Specification and in particular those sections identified during the telephone interview and reconsider the § 112 claim rejection.

8. **REMARKS (originally filed with the USPTO on November 23, 2010)**

In the Office Action mailed June 30, 2010, Claims 55-56 and 61-65 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Examiner concluded that claims 55 and 56 (and therefore claims 61-65 that depend from one of claims 55 and 56) contained subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants establish below that the Specification of US 10/825,076 fully supports claims 55 and 56 and that the inventors had possession of the subject matter claimed therein at the time the application was filed. As the written description requirement is satisfied, the 35 U.S.C. 112, first paragraph rejection should be removed and all pending claims allowed.

Claim 55

Figure 1 illustrates an automotive body (100) with a reservoir (104) mounted in proximity to the body. 35 U.S.C. 112, first paragraph, does not impose an *in haec verba*

requirement on claim language. Applicants' specification at Page 13, line 31 identifies structure 104 as a tank containing a fluid fire suppressant. Another word for an apparatus that holds a liquid is a "reservoir". Piping (106) distributes the fire suppressant from the reservoir 104 to discharge nozzles (108) located about the automotive body (100). Figure 4 illustrates sensor systems (408 – 430) envisioned by the inventors. Applicants' specification at Page 17, line 7 recognizes that combinations of sensors may be used and one particular combination is "the speed sensor 410 signal can be combined with any other instruments, such as an acceleration sensor" (Page 17, lines 12-13). Page 17, lines 1-2 identifies that acceleration sensor 408 can detect a collision. Thus, the combination recited at Page 17, lines 12-13 of a speed sensor and an acceleration sensor would determine "if the vehicle has been subject to an impact and whether the vehicle is moving subsequent to such an impact." Processor (402) illustrated in Figure 4 is connected to the sensors (408 – 430) and to the fire suppression system (406). Page 16, lines 19-20 recites that the processor 402 controls the operation and functioning of the fire extinguisher.

The preceding paragraph illustrates that the originally filed specification and drawings fully support either expressly, implicitly or inherently, all limitations of claim 55 and the rejection under 35 U.S.C. 112, first paragraph should be removed. Applicants now traverse the specific objections raised by the Examiner is the June 30, 2010, Office Action.

"with said reservoir being mounted in proximity to said body" – Page 5, lines 20-21 recites that a plurality of nozzles may be located in proximity to the fuel tank so that a fuel fire may be extinguished quickly and effectively. This shows that Applicants intended to use the word "proximity" in its conventional sense, that is near or close.

Page 11, lines 13-14 discloses that the fire suppression system includes tank (reservoir) 104. Page 13, lines 19-20 recites that the fire suppression system can be mounted in a convenient location outside of the vehicle crumple zones. Page 11, lines 5-10 recites mounting in the rear of the vehicle ("in any location able to withstand a collision") or in the trunk of the vehicle. The recited locations, "outside crumple zone," "in the rear" and "in the trunk" adequately describe to one skilled in the art that the fire suppression system (tank/reservoir) is mounted proximate (close to) the vehicle body. Page 11, lines 10-12 recites that in addition to

vehicle body structure already present, buttressing structural members may provide structural integrity to the fire suppression system. These buttressing structural members support a claim construction of the tank (reservoir) being “close to the vehicle body and not on the body”. (The Examiner’s construction of “proximity” found at the top of Page 3 of the June 30 Office Action).

Figure 1 shows the tank (reservoir) 104 in proximity to the vehicle body. Claim 55 is silent on the mounting location of the whole system and of the distribution system. Even though those components (whole system but for the tank (reservoir) and distribution system) are also proximate the vehicle body, their mounting locations are not relevant to the written description support for the mounting location of the tank.

“the vehicle has been subject to an impact and whether the vehicle is moving subsequent to such an impact” – Page 17, lines 1-2 recites that acceleration sensor 408 can detect a collision. Page 17, lines 12-13 recites a speed sensor 410 can be combined with an acceleration sensor to know when the vehicle is stopped or is coming to a stop after a collision. (Page 17, line 9)

Claim 56

Claim 56 is a multi-step method of operation: sensing an impact, sensing the vehicle speed following impact and discharging fire suppressant if vehicle speed crosses a predetermined threshold.

Page 17, lines 1-2 recites detecting a collision with an acceleration sensor 408 and Page 17, lines 12-13 recites using a speed sensor 410 in combination with an acceleration sensor to sense when the vehicle is stopped or is coming to a stop after a collision. (Page 17, line 9) Activating the fire suppression system following a collision based on a threshold speed is recited in Page 17, lines 14-19. One example presented is at a speed below 35 mph the fire suppression system does not activate while at a speed above 40 mph it activates. (Page 17, lines 19-24)

Activation on reaching a threshold speed is also disclosed at Page 4, lines 16-19. Severity of collisions may be measured by the speed preceding the collision. Sufficient time is allowed for the vehicle to slow down or come to rest after a collision before the fire suppression system is activated. See also, Page 3, lines 25-26, "Conditions that may activate the fire suppression system include ... speed or lack thereof."

The preceding paragraph illustrates that the originally filed specification and drawings fully support either expressly, implicitly or inherently, all limitations of claim 56 and the rejection under 35 U.S.C. 112, first paragraph should be removed. Applicants now traverse the specific objections raised by the Examiner in the June 30, 2010, Office Action.

"no where in the specification discloses the step of "sensing an impact upon the vehicle" and following by the step of "sensing the vehicle's speed following the impact" – attention is drawn to Page 17, lines 12-13, "the speed sensor 410 signal can be combined with any other instruments, such as an acceleration sensor." "Knowing when a vehicle is stopped or coming to a stop after a collision is important." (Page 17, lines 9-10)

The preceding illustrates that Applicants' Specification satisfies the requirements of 35 U.S.C. 112, first paragraph and claims 55 and 56 should be allowed. Claims 61-65 that depend from claims 55 and 56 and were not separately rejected should also be allowed.

Claim 71

New claim 71 is drawn to the same or substantially the same subject matter as claim 56. While 35 U.S.C. 112, first paragraph, does not impose an *in haec verba* requirement on claim language and Applicants have established that claim 56 is fully supported by their specification, the following table illustrates that claim 71, utilizing the language of Applicants' specification claims the same or substantially the same subject matter as claim 56.

Claim 56:	Claim 71:	Citation to Applicant's Specification
A method for operating a fire suppression system installed in an automotive vehicle, comprising the steps of:	A method for activating a fire suppression system installed in a vehicle, such as a passenger automobile, comprising the steps of:	Page 4, lines 1-2 Page 11, lines 5 Page 4, line 4
sensing an impact upon the vehicle;	detecting a collision with a sensor;	Page 17, lines 1-2
sensing the vehicle's speed following the impact; and	sensing when a vehicle is coming to a stop after a collision; and	Page 17, lines 8-9
discharging a fire suppression agent from an onboard reservoir in the event that the vehicle's speed crosses a predetermined speed threshold following sensing of an impact.	activating the fire suppression system to discharge a volume of fire suppressant from a tank installed in the vehicle based on vehicle speed or a lack thereof after said collision.	Page 3, lines 25-27 Page 11, lines 14-15 Page 11, line 5 Page 3, lines 26-27 Page 17, line 9

Applicants acknowledge with thanks the Examiner's allowance of claim 50.

Respectfully submitted,
Gary F. Holland, et al.

Date: December 21, 2010

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